

ATTORNEY DOCKET No.: FUJI:187

**APPLICATION FOR UNITED STATES PATENT  
DECLARATION AND POWER OF ATTORNEY**

I hereby declare, as a named inventor of the invention identified herein, that my residence, post office address and citizenship are as stated below next to my name; that I verify and believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter claimed and for which a patent is sought on the invention entitled:

TITLE: INTELLIGENT POWER MODULE

which is described and claimed in the specification: a. attached hereto; b. X filed May 1, 2001 as U.S. Patent Appln. Serial No. 09/845,787 and amended on July 28, 2004; c. X identified by the Assignee as reference number 00P00552 US and ATTORNEY DOCKET NUMBER FUJI:187.

I hereby declare that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above, and I hereby acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. §1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim priority benefits under 35 U.S.C. §119 based on the following foreign application(s) filed within one year prior to this application and/or under 35 U.S.C. § 365 for the following PCT International Application:

PRIORITY: JP 2000-137154, filed May 1, 2000

The following applications for patent or inventor's certificate on this invention were filed in countries foreign to the United States of America either (a) more than one year prior to this application, or (b) before the filing date of the above-named foreign priority application(s) (INSERT "NONE" IF NO CORRESPONDING CASES): NONE

I hereby appoint the practitioners associated with the firm and Customer Number provided below as the attorneys of record with full power of substitution and revocation to prosecute this application, to transact all business in the Patent Office, and to insert on this document the Attorney Docket Number assigned to this application. I further direct that all correspondence in connection with this application be sent to the attorneys at the address provided below:

ROSSI, KIMMS & McDOWELL LLP  
P.O. BOX 826  
ASHBURN, VA 20146-0826  
(703) 726-6020  
Customer Number: 37013

I hereby declare that I have reviewed and understand the contents of this Declaration, and that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under 18 U.S.C. §1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

FULL NAME OF FIRST INVENTOR	Naoki KUMAGAI
Residence	Nagano, Japan
Citizenship	JAPAN
Post Office Address	c/o FUJI ELECTRIC DEVICE TECHNOLOGY CO., LTD. 1-11-2 Osaki, Shinagawa-ku, Tokyo, 141-0032, Japan
Inventor's signature	<i>Naoki Kumagai</i>
Date	March 3, 2005

ADDITIONAL INVENTORS PROVIDED ON ATTACHED PAGES: YES X NO

ATTORNEY DOCKET No.: FUJI:187

FULL NAME OF SECOND INVENTOR	Kazunori OYABE
Residence	Nagano, Japan
Citizenship	JAPAN
Post Office Address	c/o FUJI ELECTRIC DEVICE TECHNOLOGY CO., LTD. 1-11-2 Osaki, Shinagawa-ku, Tokyo, 141-0032, Japan
Inventor's signature	<i>Kazunori Oyabe</i>
Date	March 3, 2005

FULL NAME OF THIRD INVENTOR	Naotaka MATSUDA
Residence	Nagano, Japan
Citizenship	JAPAN
Post Office Address	c/o FUJI ELECTRIC DEVICE TECHNOLOGY CO., LTD. 1-11-2 Osaki, Shinagawa-ku, Tokyo, 141-0032, Japan
Inventor's signature	<i>Naotaka Matsuda</i>
Date	March 3, 2005

ADDITIONAL INVENTORS PROVIDED ON ATTACHED PAGES: YES \_\_\_ NO X

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Naoki KUMAGAI, *et al.*

Serial No.: 09/845,787

Filed: 01 May 2001

Title: INTELLIGENT POWER MODULE

Group Art Unit: 2836

Examiner: Z. Kitov

Attorney Docket No.: FUJI:187

Certificate of Filing By Facsimile

I hereby certify that this paper is being transmitted via facsimile to the United States Patent & Trademark Office, Technology Center &, at telephone number 703-872-8306, on:

Date: 14 March 2005

By: 

Lyle Kimms

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
ALEXANDRIA, VA 22313-1450

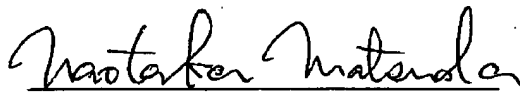
Statement from the Inventor (MATSUDA) to be Added  
Under Rule 48(a)(2)

Sir:

I state that the error in inventorship occurred without any deceptive intention on my part.

Respectfully submitted,

Date: March 3, 2005

  
Naotaka MATSUDA

## PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Date: 14 March 2005By: *Lyle Kimms*  
Lyle Kimms

COMMISSIONER FOR PATENTS  
P.O. BOX 1450  
ALEXANDRIA, VA 22313-1450

Consent of Assignee to Correct Inventorship  
Under Rule 48(a)(5)

Sir:

FUJI ELECTRONIC DEVICE TECHNOLOGY CO., LTD. is the Assignee of the entire right, title, and interest of this application by virtue of the two Assignments (copies enclosed). I am authorized to act on behalf of the Assignee and consent to the correction of inventorship, namely adding Naotaka MATSUDA as an inventor.

Respectfully submitted,

Date: March 1 '05

*Ken Meguro*  
SIGNATURE

Ken Meguro

NAME General Manager, Technology Planning Department  
Technology & Production Planning Group,  
FUJI DEVICE TECHNOLOGY CO., LTD.

TITLE

ATTORNEY DOCKET No.: FUJI:187

**\*\*\* ASSIGNMENT \*\*\***

FUJI ELECTRIC CO., LTD. is the named assignor of the following United States Patent Application, and the invention(s) and improvement(s) disclosed or claimed therein:

**SN. 09/845,787**

The name of the assignor, however, was changed to FUJI ELECTRIC HOLDINGS CO., LTD. of 1-1 Tanabeshinden, Kawasaki-ku, Kawasaki-shi, Kanagawa 210-0856, Japan (hereinafter ASSIGNOR). ASSIGNOR thus is the sole and exclusive owner of the above-identified United States Patent Application, and the invention(s) and improvement(s) disclosed or claimed therein.

In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt of which is hereby acknowledged, ASSIGNOR has sold and assigned, and by these presents hereby sells and assigns unto the following ASSIGNEE:

Name: FUJI ELECTRIC DEVICE TECHNOLOGY CO., LTD.

Address 1-11-2 Osaki, Shinagawa-ku, Tokyo, 141-0032, Japan

the entire right, title, and interest for the United States, its territories, dependencies and possessions in and to the invention(s) and improvement(s) set forth in the above-identified United States Patent Application, including any and all subsequent divisions or continuations thereof, and in and to any and all Letters Patent of the United States that may issue on any such applications, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

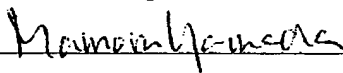
ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to ASSIGNEE, its successors or assigns in accordance herewith.

ASSIGNOR warrants and covenants that it has the full and unencumbered right to sell and assign the interests herein sold and assigned and that it has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR further covenants and agrees to: (1) execute all papers necessary in connection with the application and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as ASSIGNEE may deem necessary or expedient; (2) execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with ASSIGNEE in every way possible in obtaining evidence and going forward with such interference; (3) execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention of Protection of Industrial Property or similar agreements; and (4) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to ASSIGNEE.

ASSIGNOR hereby grants the firm of ROSSI, KIMMS & McDOWELL LLP the power to insert on this Assignment any further identification, including but not limited to the ATTORNEY DOCKET NUMBER, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office recordation of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the signature(s) of the undersigned:

Print Name & Title	Date	Signature
Mamoru YAMADA General Manager, Legal & Intellectual Property Department	February 24, 2005 Month/Day/Year	

This Assignment should preferably be signed before: a Notary Public if within the United States of America; a U.S. Consul if outside the United States of America; or before at least two witnesses. Witnessed by:

(1) _____	Month/Day/Year	_____
(2) _____	Month/Day/Year	_____

### \*\*\* ASSIGNMENT \*\*\*

In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt of which is hereby acknowledged, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to:

Name: FUJI ELECTRIC DEVICE TECHNOLOGY CO., LTD.

Address 1-11-2 Osaki, Shinagawa-ku, Tokyo, 141-0032, Japan

(hereinafter designated as the Assignee) the entire right, title and interest for the United States, its territories, dependencies and possessions, in the invention, and all applications for patent and any Letters Patent which may be granted therefore, known as:

Title: INTELLIGENT POWER MODULE

identified by the Assignee as 00P00552 US and ATTORNEY DOCKET NUMBER FUJI:187, for which the undersigned has (have) filed an application for patent in the United States of America on the date May 1, 2001 and now designated as U.S. Patent Application Serial No. 09/845,787.

The undersigned hereby agree(s) to: (1) execute all papers necessary in connection with the application and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient; (2) execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference; (3) execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention of Protection of Industrial Property or similar agreements; and (4) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said applications or any division or divisions or continuing applications thereof to said Assignee, as Assignee of the entire interest, and hereby covenants that the undersigned have full right to convey the entire interest herein assigned, and that the undersigned has (have) not executed and will not execute any agreement in conflict herewith.

The undersigned hereby grant(s) the firm of ROSSI, KIMMS & McDOWELL LLP the power to insert on this assignment any further identification, including but not limited to the ATTORNEY DOCKET NUMBER, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office recordation of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the signature(s) of the undersigned:

Print Name	Date	Signature
(1) Naoki KUMAGAI	3/3/2005 Month/Day/Year	<i>Naoki Kumagai</i>
(2) Kazunori OYABE	3/3/2005 Month/Day/Year	<i>Kazunori Oyabe</i>
(3) Naotaka MATSUDA	3/3/2005 Month/Day/Year	<i>Naotaka Matsuda</i>
(4)	Month/Day/Year	
(5)	Month/Day/Year	
(6)	Month/Day/Year	

This assignment should preferably be signed before: a Notary Public if within the United States of America; a U.S. Consul if outside the United States of America; or before at least two witnesses. Witnessed by:

(1)	Month/Day/Year	
(2)	Month/Day/Year	